

telephone counseling can significantly improve blood pressure control. Our data show also that interventions run by allied health professionals (i.e. other than the prescriber/doctor), improve adherence to medicines and promote hypertension-related health behaviors.

#### PCV106

##### FACTORS AFFECTING PERSISTENCE OF TREATMENT IN RECIPIENTS WITH NEWLY-DIAGNOSED HYPERTENSION IN A MEDICAID POPULATION

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**OBJECTIVES:** To describe initially-prescribed drug treatments for hypertension in newly-diagnosed recipients in a Medicaid population and to determine factors affecting 6- and 12-month persistence rates. **METHODS:** This retrospective study included continuously-enrolled Louisiana Medicaid recipients aged 18-64 who were newly-diagnosed with hypertension between January 2006 and December 2008. Dually-eligible recipients were excluded. Recipients were followed for one year after their index date. Initial drug therapy was described, and persistence rates were calculated 6- and 12-months post-index, for recipients who received diuretics, beta-blockers (BBs), angiotensin-II receptor blockers (ARBs), angiotensin converting enzyme inhibitors (ACEIs), and calcium channel blockers (CCBs). A 30-day grace period was allowed for refill gaps. Race, gender, age, and co-morbidity were used as predictor variables in logistic regression analyses of persistence for each drug class. **RESULTS:** A total of 4946 recipients were eligible for inclusion. Of these, 2352 received no drug therapy and 289 did not receive therapy in one of the analyzed drug classes, leaving a final study group of 2305 recipients. The study group was primarily female (68%) and African-American (67%). The majority of recipients received diuretics, followed by ACEIs, ARBs, BBs, and CCBs. Persistence rates for initially-prescribed drugs ranged from 21.6% for diuretics to 31.6% for ACEIs at 6-months, and from 10.7% for diuretics to 17.9% for CCBs at 12-months. Within drug classes, persistence ranged from 24.2% for diuretics to 33.1% for ACEIs at 6-months and 12.4% for diuretics to 19.3% for BBs at 12-months. Race, gender, and age were significant factors predicting persistence, with African-Americans less persistent than Whites, females less persistent than males, and younger recipients less persistent than older recipients. **CONCLUSIONS:** Approximately half of newly-diagnosed recipients did not receive drug therapy, and among treated patients, persistence rates were poor. Race, gender, and age were factors influencing persistence of therapy in this study group.

#### PCV107

##### PATTERNS OF NON-ADMINISTRATION OF ORDERED DOSES OF VENOUS THROMBOEMBOLISM PROPHYLAXIS: IMPLICATIONS FOR NOVEL INTERVENTION STRATEGIES

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**OBJECTIVES:** Recent studies have documented high rates of non-administration of ordered venous thromboembolism (VTE) prophylaxis doses. Intervention strategies that target all patients have been effective, but prohibitively resource-intensive. We aimed to identify efficient intervention strategies based on patterns of non-administration of ordered VTE prophylaxis. **METHODS:** In this retrospective review of electronic medication administration records, we included adult hospitalized patients who were ordered pharmacologic VTE prophylaxis with unfractionated heparin or enoxaparin over a seven-month period. The primary measure was the proportion of ordered doses of VTE prophylaxis not administered, assessed at the patient, floor, and floor type levels. Differences in non-administration rates between groups were assessed using generalized estimating equations. **RESULTS:** A total of 103,160 ordered VTE prophylaxis doses during 10,516 patient visits on twenty-nine patient floors were analyzed. Overall, 11.9% of ordered doses were not administered. Approximately 19% of patients missed at least one quarter and 8% of patients missed over one half of ordered doses. There was marked heterogeneity in non-administration rate at the floor level (range: 5-27%). Patients on medicine floors missed a significantly larger proportion (18%) of ordered doses compared to patients on other floor types (8%, Odds Ratio: 2.4, p<0.0001). However, more than half of patients received at least 86% of their ordered doses, even on the lowest performing floor. The 20% of patients who missed at least two ordered doses accounted for 80% of all missed doses. **CONCLUSIONS:** A substantial proportion of ordered doses of VTE prophylaxis were not administered. The heterogeneity in non-administration rate between patients, floors, and floor types can be used to target interventions. The small proportion of patients that missed multiple ordered doses accounted for a large majority of non-administered doses. This recognition of the Pareto principle provides opportunity to efficiently target a relatively small group of patients for intervention.

#### PCV108

##### A PATIENT THERAPEUTIC EDUCATION FOR HYPERTENSIVE PATIENTS: THE ITALIAN AGENCY OF DRUGS (AIFA) FINAL REPORT

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**OBJECTIVES:** In 2007 the Work Group of Cardarelli Hospital (Naples, Italy) developed a therapeutic education program to reduce blood pressure (BP) in

patients with hypertension through a better adherence to pharmacological and non pharmacological treatment. The program was funded by a grant from Italian Agency of Drugs (AIFA). The activity involved General Practitioners (GPs) from Campania region. **METHODS:** The study was an experimental controlled trial with the enrolment of 2329 (1139 Intervention and 1190 Controls). Group Intervention (I) patients participated to 3 educational sessions (two focus group and one role play) respectively 2, 4 and 9 months after the recruitment. Group Control (C) patients received usual care. Blood pressure values were registered at the baseline and after 12 months. Focus groups are qualitative interviews with a small number of people brought together to discuss a host of topics under the guide of a "moderator". Role play is a simulation that reflects a situation found in the real world. The aim of role play is to learn how to perform the instructions and how to best handle a situation by practicing and interacting with people who share the same condition. Univariate General Linear models (GLM) were used to compare mean variation in systolic and diastolic blood pressure (SBP/DBP) between groups (Intervention and control) after adjusting for the covariates measured at baseline. **RESULTS:** Adjusted mean reduction of SBP was -1.6mmHG 95% C.I [-6.3mmHG ; +3.1mmHG] in the intervention group and +0.8mmHG; 95% C.I [-3.9mmHG ; +5.4mmHG] in the control group. The different behavior of the two groups led to a significant treatment effect (Intervention vs Control) equal to -2.4mmHG, 95% C.I [-3.4 mmHG ; -1.3mmHG]. **CONCLUSIONS:** Our findings show that a patient-oriented approach is a powerful tool for reaching better blood pressure control and underlying the essential role of patients involvement in the management of their care.

#### PCV109

##### HIDDEN BARRIERS TO DELIVERY OF PHARMACOLOGIC VENOUS THROMBOEMBOLISM PROPHYLAXIS: THE ROLE OF NURSING BELIEFS AND PRACTICES

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**OBJECTIVES:** A recent study at our institution indicated that 12.8% of all prescribed doses of venous thromboembolism (VTE) prophylaxis are not administered, with some nursing units approaching 30%. Our goal was to assess nursing beliefs and practices related to non-administration of ordered VTE prophylaxis doses. **METHODS:** We conducted a mixed-methods study, including qualitative observation and quantitative survey assessment. The study was conducted on twelve inpatient nursing units with disparate non-administration rates of ordered VTE prophylaxis doses of either unfractionated heparin or enoxaparin. Qualitative aspects of the nurse-patient encounter were directly observed by the lead investigator at the scheduled administration time of VTE prophylaxis until thematic saturation was achieved. A survey was distributed to all nurses on the included floors to identify beliefs and practices regarding non-administration of ordered VTE prophylaxis doses. **RESULTS:** Low-performing units had an average pharmacologic VTE prophylaxis non-administration rate of 18%, compared to the high-performing units which averaged a non-administration rate of 10%. During observations, some nurses presented pharmacologic VTE prophylaxis to their patients as an optional therapy and entered into negotiations with their patients whereby patients could promise to walk to avoid a dose. Nurses on low-performing units were more likely to respond that VTE prophylaxis was prescribed for patients who do not require it (83% vs. 62%, p<0.0001) and were also more likely to believe that they had the clinical decision-making skills to determine when to omit unnecessary doses of prescribed VTE prophylaxis (80% vs. 50%, p<0.0001). Workload was not identified as a reason for non-administration on either high- or low-performing units. **CONCLUSIONS:** Nurses on low-performing units more often believe they have the skills to determine which patients require pharmacologic VTE prophylaxis and are more likely to present the medication as optional to patients. Strategies to improve administration rates should incorporate these findings.

#### PCV110

##### A SYSTEMATIC REVIEW OF ADHERENCE TO DIABETES AND CARDIOVASCULAR MEDICATIONS IN IRAN; A CALL FOR PATIENT EDUCATION AND REINFORCEMENT

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**OBJECTIVES:** Adherence to medications (AM) has been a major research priority for recent decades. Numerous factors including poor access to medicines have been identified to affect AM particularly in middle income countries (MIC). However, access to medicines seems to be addressed well in Iran as a MIC but little is known about the rate and the determinants of AM for Iranian patients. In the present study, we systematically reviewed the AM literature related to Iranian patients with diabetes (DM) and cardiovascular diseases (CVD). **METHODS:** We searched biomedical databases including Scopus, Web of Science, PubMed, CINAHL, and Google Scholar, Scientific Information Database, and IranMedex from inception to July 2012. Two independent researchers screened all abstracts. Studies were included if they reported rate of adherence to CVD or DM medications in Iran. We also included studies which had focused on AM determinants or AM improving interventions. Two teams of researchers reviewed full-texts of the relevant articles for quality appraisal and data extraction. We preferred qualitative synthesis of literature as the AM definitions and measurement tools were highly diverse among studies. **RESULTS:** Among 1003 citation, fourteen studies were eligible for review. Adherence rate for